

NONEXPOSED HEAT SINK FOR
SEMICONDUCTOR PACKAGE

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ABSTRACT

09/ 513067

A semiconductor package having a fully encapsulated heat sink is disclosed, along with leadframes for making the package. A semiconductor chip is mounted on a surface of the heat sink. The heat sink is in an electrically insulative, thermally conductive connection with a plurality of leads that extend from a first end that overhangs the heat sink to an second end outside of the package body. A ring of a double sided adhesive tape attaches the heat sink to the overhanging portion of the leads. The heat sink design minimizes voids and damage caused by the encapsulation process, while maintaining thermal performance comparable to conventional, exposed heat sinks.